

REMARKS

This is in full and timely response to the Office Action mailed April 24, 2003, submitted concurrently with a Petition for Extension of Time to within the first extended month. By this Amendment, claims 1-3 were cancelled without prejudice or disclaimer to their underlying subject matter, and claims 4-9 were added. Support for new claims 4-9 can be found variously throughout the specification, for example, original claims 1-3, and page 2, line 24 to page 10, line 25. No new matter was added. Claims 4-9 are pending in this application, with claims 4-5 being independent. By this Amendment, Applicant believes that all pending claims are in condition for allowance. Reexamination and reconsideration in light of the above amendments and the following remarks is respectfully requested.

Specification

The Office Action has requested that the Applicant amend the specification to recite that this application is a 371 application. Applicants disagree with this request. Specifically, since this application is a nationalization under 35 U.S.C. §371, the international application is not an earlier application, and a benefit claim in the national stage to the international application is inappropriate. As stated clearly in the MPEP at §1893.03(c) (next to last paragraph), "Accordingly, it is not necessary for the applicant to amend the first sentence of the specification to reference the international application number" The examiner is reminded that the history of the application as a 371 application will be shown on the face of the issued patent.

Withdrawal of this request is requested.

Rejections under 35 U.S.C. §112, second paragraph

Claims 1-3 were rejected under 35 U.S.C. §112, second paragraph for indefiniteness. By this Amendment, claims 1-3 were cancelled, mooting this rejection. Withdrawal of this rejection is requested.

Rejections under 35 U.S.C. §102

Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by Canadian Patent No. 1166374 to Suk. Applicant respectfully traverses this rejection.

By this Amendment, claim 1 was cancelled, mooted this rejection. However, in order to expedite prosecution, this rejection will be addressed as pertaining to new independent claims 4 and 5.

Claim 4 recites a single phase propellant-concentrate aerosol composition for use in the spray application of an active ingredient from a pressurized container, consisting essentially of: (a) a concentrate of 10 to 60 wt %, the concentrate consisting essentially of (i) an oil ingredient of 30 to 90 wt %, (ii) polyol of 5 to 50 wt %, (iii) water of 1 to 40 wt %, and (iv) the active ingredient of 0.1 to 20 wt %; (b) a dimethyl ether propellant of 90 to 40 wt %; wherein the concentrate does not have a flash point under 1 atmosphere of pressure.

Claim 5 recites a single phase propellant-concentrate aerosol composition for use in the spray application of an active ingredient from a pressurized container, consisting essentially of: (a) a concentrate of 10 to 60 wt %, the concentrate consisting essentially of (i) an oil ingredient of 30 to 90 wt %, (ii) polyol of 5 to 50 wt %, (iii) water of 1 to 40 wt %, and (iv) the active ingredient of 0.1 to 20 wt %; (b) a dimethyl ether propellant of 90 to 40 wt %; wherein the concentrate does not have a flash point under 1 atmosphere of pressure; wherein the polyol and water form a hydrophilic liquid combination and the active ingredient and the oil ingredient form an oleophilic liquid combination, and wherein the hydrophilic liquid combination and the oleophilic liquid combination are separable.

Generally, the oil ingredient such as hydrocarbon, used as the solvent, has a low flash point and lowers the flash point of the concentrate when in a high ratio. On the other hand, when the concentrate consists of a high ratio of water to not have a flash point, it will be difficult to dissolve both the water and the oil ingredient in the dimethyl ether.

Suk '374 discloses a single phase liquid propellant-solvent composition suitable for use in spray application of an active ingredient from a pressurized container onto a substrate surface, consisting essentially of: (a) about 20 to about 75 wt% of dimethyl ether, (b) about 10 to about 50 wt% of water, (C) about 1 to about 30 wt% of at least aliphatic monohydric alcohol of the formula: R-OH wherein R is an unsubstituted straight or branched chain alkyl group containing from 1 to 6 carbon atoms, and (d) about 1 to 15 wt% of at least one coalescing solvent such as propylene glycol ether or propylene glycol methyl ether. Further, Suk '374 discloses a water

based aerosol paint composition comprising the above propellant—solvent composition and water dillutable film-forming polymer.

However, the propellant-solvent composition disclosed in Suk '374 has at least (c) about 1 to about 30 wt% of at least aliphatic monohydric alcohol of the formula: R-OH wherein R is an unsubstituted straight or branched chain alkyl group containing from 1 to 6 carbon atoms. Additionally, the aliphatic monohydric alcohol has low flash point. As disclosed in the attached reference (Alcohol Handbook published on 1980, page 440), monohydric alcohol such as ethyl alcohol has flash point at low temperature, and solution with ethyl alcohol having 5 sol% (4 wt%) or more flashes at the temperature under 100 degrees Celsius.

Moreover, the concentrate of the examples disclosed in the Suk likely has a flash point under 1 atm pressure. The example 1 of the Suk '374 has 15 wt% of isopropyl alcohol in the aerosol composition and ratio without dimethyl ether is over 25 wt%. And like shown in the Table 1 below, all the other examples have a high ratio of the lower alcohol (isopropyl alcohol) and all are believed to have a flash point under 1 atm. pressure. So, Suk '374 does not disclose, teach or suggest any concentrate which does not have a flash point under 1 atm. pressure. Therefore, the aerosol composition of Suk '374 is different from the present invention.

Table I

	Isopropyl Alcohol	Isopropyl Alcohol without DME
Example 2, 8, 9 of Suk	15 wt%	2.5 wt%
Example 10, 13 of Suk	15 wt%	21.4 wt%
Example 11	7.7 wt%	12.8 wt%

A document can only anticipate a claim if the document discloses, explicitly or implicitly, each and every feature recited in the claim. Verdegall Bros. v. Union Oil Co. of Calif., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Since Suk '374 fail to disclose, either explicitly or implicitly, teach or suggest at least the above-noted features recited in independent claims 4 and 5, Suk '374 cannot anticipate the claim. At least in view of the foregoing, claims 4 and 5 are allowable.

Dependent claims 6 depending from claims 4 or 5, and claims 7-9 depending from claim 4, are also allowable for the reasons above. Moreover, these claims are further distinguished by the materials recited therein, particularly within the claimed combination.

Claims 1-3 are rejected under 35 U.S.C. §102(a) as being anticipated by European Patent No. 0 888 716 to Watanabe et al. Applicants respectfully traverse this rejection.

By this Amendment, claims 1-3 were cancelled, mooted this rejection. However, in order to expedite prosecution, this rejection will be addressed as pertaining to new independent claims 4 and 5.

The examples of Watanabe et al. '716 show the formation of oil, 5 parts of tiyssop; polyol, 2 parts of carare-diol; effective ingredient, 0.2 parts of allethrin, the whole in olephilic liquid-alcohol (25 parts of isopropyl alcohol), with 30 parts of water and 45 parts of DME added. The 9.1 wt% of tiyssop, 3.6 wt% of carare-diol, 0.4 wt% of allethrin, 32.7 wt% of isopropyl alcohol, and 54.5 wt% of water are the ratios without DME. This formation without DME again has a high ratio of isopropyl alcohol, and believed to have a flash point under 1 atm pressure.

A document can only anticipate a claim if the document discloses, explicitly or implicitly, each and every feature recited in the claim. Verdegall Bros. v. Union Oil Co. of Calif., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Since Watanabe et al. '716 fail to disclose, either explicitly or implicitly, teach or suggest at least the above-noted features recited in independent claims 4 and 5, Watanabe et al. '716 cannot anticipate the claim. At least in view of the foregoing, claims 4 and 5 are allowable.

Dependent claims 6 depending from claims 4 or 5, and claims 7-9 depending from claim 4, are also allowable for the reasons above. Moreover, these claims are further distinguished by the materials recited therein, particularly within the claimed combination.

Claims 1-3 are rejected under 35 U.S.C. §102(b) as being anticipated by European Patent No. 0 521 455 to Yamada et al.

By this Amendment, claims 1-3 were cancelled, mooted this rejection. However, in order to expedite prosecution, this rejection will be addressed as pertaining to new independent claims 4 and 5.

Yamada et al. '455 disclose aerosol composition, which comprise a biodegradable hydroxycarboxylic acid polymer as a film-forming component, and they say the aerosol composition can include effective ingredient such as insecticide, oils, glycols solvent, and water. However, Yamada et al. '455 do not say anything about concentrate (aerosol composition without dimethyl ether) having no flash point. Especially, the concentrate of the examples (except for example 3, which does not include any alcohol) shown in the Yamada et al. '455 includes high ratio of ethanol, and these concentrates likely have a flash point (s. Table 2). Moreover, Yamada et al. '455 do not disclose specific combination of oil ingredient, water, and polyol.

Accordingly, the Yamada et al. '455 does not disclose the present invention.

Table 2

	Wt% of alcohol without DME	Wt% of water without DME
Example 1	66.7 wt% of ethanol	0
Example 2	40 wt% of ethanol	40 wt%
Example 3	0	42.9 wt%
Example 4	60 wt% of ethanol	0
Example 5	54 wt% of ethanol	0
Example 6	76.2% of ethanol	0
Example 7	67.6 wt% of ethanol	0

A document can only anticipate a claim if the document discloses, explicitly or implicitly, each and every feature recited in the claim. Verdegall Bros. v. Union Oil Co. of Calif., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Since Yamada et al. '455 fail to disclose, either explicitly or implicitly, teach or suggest at least the above-noted features

recited in independent claims 4 and 5, Yamada et al. '455 cannot anticipate the claim. At least in view of the foregoing, claims 4 and 5 are allowable.

Dependent claims 6 depending from claims 4 or 5, and claims 7-9 depending from claim 4, are also allowable for the reasons above. Moreover, these claims are further distinguished by the materials recited therein, particularly within the claimed combination.


Regarding WO 96/22686 to Nelson (same as CN 17675), which was filed in the IDS of July 15, 2003, Nelson '686 discloses insecticidally-active compositions that form an oil-out emulsion. The present invention claims do not form oil-out emulsion. The concentrate of the present invention forms a single-phase by dissolving with the DME. It is known that the DME dissolves both water and oil and breaks the emulsion. In the example of the Nelson '686, liquefied petroleum gas is used as a propellant at 8.0 wt%. Further, this LPG may replace as DME. but the amount of DME is not enough to form dissolving single phase. Accordingly, Nelson '686 does not disclose, teach or suggest the present invention.

CONCLUSION

For the foregoing reasons, all the claims now pending in the present application are believed to be clearly patentable over the prior art of record. Accordingly, favorable reconsideration of the claims in light of the above remarks is courteously solicited. If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

Dated: August 25, 2003

Respectfully submitted,

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